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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,135	02/06/2002	Jose Merino-Lopez	A33384-A	2661
5514	7590	05/21/2004		
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			EXAMINER MAKI, STEVEN D	
			ART UNIT	PAPER NUMBER
			1733	
DATE MAILED: 05/21/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/071,135	Applicant(s) MERINO-LOPEZ ET AL.	
	Examiner Steven D. Maki	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 22-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received. → (France 01/01672)
2. ☒ Certified copies of the priority documents have been received in Application No. 09/636,566.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received. (France 99/10422)
(France 99/16835)

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>040802</u> . | 6) <input type="checkbox"/> Other: _____ |

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- 1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2) Claims 17, 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 17, there is no antecedent basis for "the thin strip". Should claim 17 depend on claim 12 instead of claim 15?

Claim 19 is indefinite because it is dependent on itself.

Claim 19 (apparently dependent on claim 1) is confusing since claim 1 requires the sensor to be within the first tread element whereas claim 19 requires the sensor to be embedded in the wall of the tire. In other words, it is unclear if claim 19 is changing the location of the sensor.

As to claim 20, it is unclear what additional limitation is being required.

- 3) Claims 19 and 20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 19 fails to further limit because it changes the location of the sensor.

Claim 20 fails to further limit since the "limitation" therein is already required by claim 1.

- 4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5) Claims 1, 6 and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Becherer (US 5964265).

In claims 1, 19 and 20, the claimed sensor reads on sensor 4, the first tread element reads on the center tread lug 1 having the sensor 4, the second tread element reads on one of the other tread lugs (e.g. an intermediate tread lug). In claim 1, the description of "at least within a range of rolling conditions to be monitored, the contact surface thereof slides relative to the ground during its passage through the contact area" is sufficiently broad so as to read on Becherer's tread lugs which must *at least under some conditions, slide* relative to the ground.

As to claim 6, more than one tread lug can have the sensor.

As to claim 21, the sensor can be a Hall sensor.

6) Claims 1-4, 6-10, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by German '917 (DE 3939917).

German '917 discloses a vehicle tire 12 having a tread (tire profile) 11 and a multiplicity of measuring knobs 10 wherein a "sensor" 20 is embedded within the knob 10 as shown in figure 2 so that (1) sensor unit 16 can detect those measuring knobs which slip (slide) during the rolling of the tire and (2) the momentary friction between the tire 12 and road surface (carriageway surface) 14 can be calculated so as to determine the instantaneous adhesion between the tire and road surface.

As to claim 1, 19 and 20, the claimed tire is anticipated by German '917's tire. The claimed sensor reads on sensor 20. The claimed first tread element reads on the measuring knob having the sensor therein. The claimed second tread element reads on another one of the measuring knobs.

As to claims 2-4, note German '917's teaching that the measuring knobs have "different frictional coefficients".

As to claim 6, more than one measuring knob is provided.

Claims 7-10 read on German '917's measuring knob having the centrally located sensor. Claims 7-10 fail to require the central zone and encircling zone to have different compositions or be differentiated by structure such as a cutout.

7) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8) Claims 1, 6 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over German '917 in view of Becherer.

Claim 1 is considered to be anticipated by each of German '917 and Becherer. In any event: As to claims 1, 6, 19 and 20, it would have been obvious to one of ordinary skill in the art to use German '917's measuring knobs (each of which has a sensor embedded therein) in combination with tread lugs which do not have sensors since (1) German '917, directed to determining friction conditions between a tire and a road surface, teaches incorporating the sensor containing measuring knobs in a tire

tread and (2) Becherer, also directed to determining friction conditions between a tire and a road surface, teaches providing at least one tread lug (tread element) with a sensor; the remaining tread lugs thereby not having sensors therein.

As to claim 18, it would have been obvious to use a sufficient number of measuring knobs such that there is always one in the contact zone (footprint) in view of German '917's teaching that the friction conditions are determined when the measuring knob is in the contact zone / footprint.

As to claim 21, it would have been obvious to use a device(s) with Hall effect as the sensor in the measuring knob since Becherer teaches that Hall sensors are known sensors for determining friction conditions for a tire tread.

9) Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over German '917 in view of Becherer as applied above and further in view of Oubridge (US 3364965), Knill (US 4319620) or Japan '807 (JP 61-263807).

As to claims 2-4, it would have been obvious to one of ordinary skill in the art to use the claimed different materials for the tread elements in German '917's tread, which as noted above comprise measuring knobs having different frictional coefficients, in view of Oubridge, Knill or Japan '807's teaching to use different materials for tread elements of a tread so as to improve properties such as coefficient of friction, rolling resistance and steering stability respectively.

10) Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over German '917 in view of Becherer as applied above and further in view of Japan '802 (JP 62-6802) or Kukimoto et al (US 5445201).

As to claim 5, it would have been obvious to one of ordinary skill in the art to locate the sensor in a low height tread element in view of Japan '802's teaching to use a low height tread element 11 to improve tractional performance or Kukimoto et al's teaching to use a low height tread element (e.g. low height rib 3) to improve uneven wearing.

11) Claims 7-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over German '917 in view of Becherer as applied above and further in view of Japan '807, Japan '321 (JP 6-171321) or Japan '918 (JP 8-118918) and optionally further in view of Travert (Europe 1076235 or Brazil 200002924).

Japan '807, Japan '321 and Japan '918 are applied in the alternative since (1) Japan '807 differentiates the central and encircling zones using composition (similar to applicant's figure 5 embodiment), (2) Japan '321 differentiates the central and encircling zones using an annular cutout (similar to applicant's figure 6 embodiment), and (3) Japan '918 differentiates the central and encircling zones using wells (similar to applicant's figure 4 embodiment).

With respect to the optionally applied Travert, this application is a CIP of the parent application. Claims 7-17 are not entitled to the benefit of the filing date of the parent application since each of claims 7-17 are not directed solely to the subject matter disclosed in the parent application. The subject matter of claims 7-17 was first introduced in this CIP application. Accordingly, the filing date of claims 7-17 is 2-6-02 (the filing date of this CIP application). Furthermore, applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers

has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15. A translation of applicant's foreign priority document France 01/01672 would remove Europe 1076235 as prior art but not Brazil 200002924 since the Europe reference is available as prior art under 102(a) whereas Brazil is available as prior art under 102(b). Only an abstract of Brazil is readily available to the examiner. Since Brazil is an foreign equivalent to applicant's priority document, shares a common inventor with this application and, as noted above, is available as prior art under 102(b) against claims 7-17, applicant is requested to provide a copy of Brazil 200002924.

As to claims 7-17, it would have been obvious to one of ordinary skill in the art to form an encircling zone and central zone as claimed wherein the central zone has German '917's sensor in view of (1) Japan '807, Japan '321 or Japan '918's teaching to form a land portion in a tread having an encircling zone and central zone for improving steering stability, improving traveling stability and preventing wear respectively and optionally (2) Travert's teaching to locate a sensor, which like that of German '917 detects sliding, in a central zone of a land portion between side portions of the land portion. As to claim 12, note the annular cutout (thin recess strip) suggested by Japan '321. As to claim 17, it would have been an obvious alternative to incline the annular cut since it is taken as well known / conventional per se to orient an annular slit such that the walls are inclined instead of perpendicular to the tread surface. As to claim 13, note the wells suggested by Japan '918. As to claim 14, it would have been an obvious alternative to incline the wells since it is taken as well known / conventional per se to

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orient wells (holes) such that they are at 90 degrees or inclined with respect to the tread surface. As to claim 15, Japan '807 suggests using different compositions.

Remarks

12) Applicant's election without traverse of Group I tire in Paper No. 2-20-2004 is acknowledged.

Applicant states: "Applicant hereby cancels claims 22-29 ..." (page 1 of response filed 2-20-04). Claims 22-29 remain pending since applicant did not present claims 22-29 with the canceled claim identifier.

The remaining references are of interest.

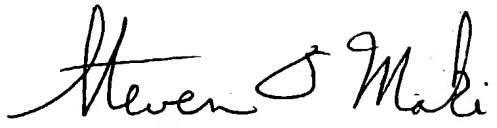
13) No claim is allowed.

14) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
May 16, 2004


STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
Av 1733
5-16-04